Amendments to the Claims

This listing of claims will replace the originally filed claims in the application.

Listing of Claims:

Claims 1 – 10 (cancelled).

Claim 11 (new): A method for cleaning a film-forming apparatus in order to remove a ruthenium-type deposit residing on a constituent member of the film-forming apparatus after said apparatus has been used to form a film comprising ruthenium or solid ruthenium oxide, wherein at least the surface region of the ruthenium-type deposit comprises solid ruthenium oxide, said method being characterized by:

- a) converting the aforesaid solid ruthenium oxide into ruthenium metal by bringing the ruthenium-type deposit into contact with a reducing gas that contains a reducing species comprising hydrogen or the hydrogen radical;
- b) subsequently converting the ruthenium metal into volatile ruthenium oxide by bringing the ruthenium metal into contact with an oxidizing gas that contains an oxidizing species comprising an oxygenated compound; and
- c) removing this volatile ruthenium oxide from the film-forming apparatus.

Claim 12 (new): The method of claim 11, wherein the reducing gas is composed of inert gas that contains hydrogen at from 1 to 5 volume%.

Claim 13 (new): The method of claim 11, wherein contact between the ruthenium-type deposit and the reducing gas is carried out at 80°C to 800°C.

Claim 14 (new): The method of claim 11, wherein contact between the ruthenium-type deposit and the reducing gas is carried out at pressures of 0.01-1000 torr.

Claim 15 (new): The method of claim 11, wherein the aforesaid oxidizing gas comprises ozone-containing oxygen gas originating from an ozone generator.

Claim 16 (new): The method of claim 11, wherein contact between the ruthenium metal and oxidizing gas is carried out at 0°C to 150°C.

Claim 17 (new): The method of claim 11, wherein contact between the ruthenium-type deposit and oxidizing gas is carried out after the reducing species has been exhausted off.

Claim 18 (new): The method of claim 11, characterized by:

- a) monitoring the concentration of volatile ruthenium oxide in the volatile ruthenium oxide-containing gas stream flowing out of the film-forming apparatus; and
- b) stopping the oxidizing gas at the point at which the volatile ruthenium oxide can no longer be detected in the aforesaid gas stream.

Claim 19 (new): The method of claim 11, wherein the volatile ruthenium oxidecontaining gas stream flowing out of the film-forming apparatus is heated in order to decompose the volatile ruthenium oxide therein.

Claim 20 (new): The method of claim 11, wherein the volatile ruthenium oxide-containing gas stream flowing out of the film-forming apparatus is brought into contact with a decomposition catalyst comprising ruthenium metal or a solid ruthenium compound in order to decompose the volatile ruthenium oxide in said gas stream.